

Understanding How TVA Works



Why is it important for employees to understand how TVA works? It's important so that you can be involved. It's important because it will help to create a common understanding of the company's vision, goals, strategic objectives and success factors. It's important because understanding TVA enables you, as an employee, to be actively engaged in the business and to see how every action you perform, big or small, can help prepare TVA for the future. Your individual efforts are powerful contributors to TVA's bottom line and success. And, TVA's success is rewarding for all of us as employees.

This special section of Inside TVA is the first in a series to help you better understand the business of TVA and your role in helping the company achieve its Strategic Objectives. It provides an overview of how TVA generates revenue, how that money is used to operate TVA's business, and who benefits from what TVA produces. Finally, it tells what you can do to help TVA achieve excellence in business for the benefit of the Tennessee Valley and the nation.

Future topics in this series will further explain our business and the competitive challenges facing the utility industry.

With facilities that generate and transmit electricity to 158 power distributors and 62 directly served industries that ultimately serve more than 8.3 million people, the Tennessee Valley Authority is the nation's largest public power producer. This unique federal corporation provides affordable, reliable electricity to consumers in the seven-state Tennessee Valley region.



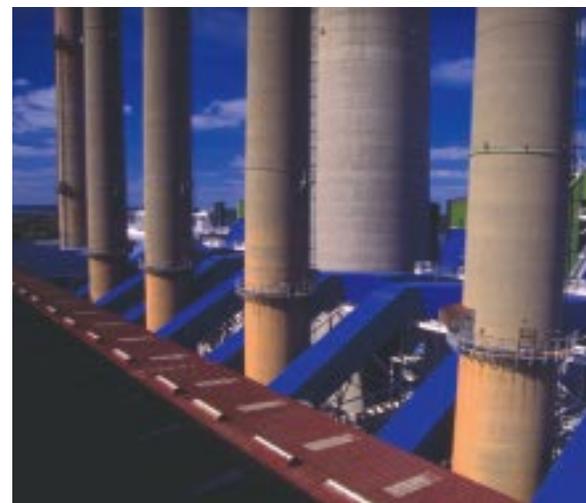
Diversity is a great strength of the TVA power system. Nuclear, hydro and fossil-fuel plants produce most of TVA's electricity, but combustion turbines and a pumped-storage plant also help meet power needs when demand is high. In

addition, green power plays a growing role in the generation mix and helps foster understanding and support for the use of renewable resources.

But TVA does much more than generate power. TVA also works to support economic development in the Valley and serves as an environmental steward of the nation's fifth-largest river system.

In addition to providing the affordable, low-cost power which is a big draw to business and industry, TVA offers an array of economic development services that help new businesses get started and existing businesses expand. It also helps communities plan for sustainable growth through local, regional and state partnerships.

TVA's management of the Tennessee River system is integrated with all of its other responsibilities. TVA dams prevent \$200 million in flood damage annually; generate clean, efficient electric power; and provide cooling water for fossil and nuclear plants. The river highway formed by TVA's dams and locks helps speed almost 50 million tons of goods to market each year. And careful stewardship protects



recreation resources plus a vast supply of drinking water and invaluable wildlife habitat.

In addition to its strategic objectives for affordable, reliable power production, sustainable economic development and integrated river management, TVA also builds its business around three additional goals: reducing the delivered cost of power relative to the market, continuing the trend of debt reduction and strengthening working relationships with all of its stakeholders.



The Big Picture

Where does TVA revenue come from and where does it go? Just as it's important for all individuals to know how much money they make, how much they spend, and what they buy, it's important for every employee to know these same things about TVA.

Here's a snapshot guide to help you understand the business of this huge corporation called "TVA."

START HERE

1 How does TVA generate cash?*

- By selling power to 158 public power distributors and 62 directly served customers.
- By selling power through 11 power exchange agreements.
- By issuing bonds to pay for debt retirement or capital investments.

*TVA receives no tax money or other appropriations from the federal government.

2 What does TVA use this cash for?

- Fuel (coal, uranium, natural gas), other supplies, and services needed to run the business: more than \$2 billion per year.
- Payroll and employee benefits, both for the power business and for river stewardship: about \$1.3 billion a year.
- Interest and payments on debt. Just as you pay your credit card bill, TVA pays back money it has borrowed, with interest.
- Payments to the states where TVA does business: \$328 million in 2002. Although TVA is not required to pay state or local taxes, these payments are similar to such taxes that other corporations pay.
- Capital expenditures to maintain plant and equipment and to fund investments in new generating plants and clean-air equipment: more than \$1 billion spent on each since 1995.

6 What does all of this mean to TVA?

- Prosperity and excellent quality of life in the Tennessee Valley create continuing demand for electricity, generating more revenue for TVA. TVA must be financially healthy to achieve excellence in business performance and public service.

3 What does TVA produce? This includes what we sell and other value we add to the Tennessee Valley.

- Affordable, reliable power. TVA generated more than 150 billion kilowatt-hours of power in 2002, and the average residential power rate in the areas served by TVA is 25-percent below the national average.
- Integrated river system management. The system provides navigation, flood control, cooling for power plants, energy to spin turbines, water for consumption, wildlife habitat and recreation. The river system includes 800 miles of commercially navigable waterways and 11,000 miles of public shoreline.
- Economic development. TVA helped create or retain more than 48,000 jobs and made more than \$22 million in economic development loans to Valley businesses in 2002. In addition, TVA's financial and technical assistance leveraged \$1 billion in capital investment from its economic development partners in 2002.
- Technical assistance. TVA develops strategies to reduce or eliminate pollutants and increase industrial efficiency. TVA investments in science and technology have led to the commercial uses that positively impact the economy and the environment.

See diagram on Page 4 for an overview of TVA's service area and its diverse generating mix.

What does this mean for you?

TVA's employees are its competitive advantage. Every person at TVA must be involved and actively engaged in TVA's business. Your active participation is important because individual actions, when combined, become very powerful. Here are some of the things you can do to help TVA:

- Increase your knowledge and understanding of how TVA works.
- Know how your individual efforts support TVA's Winning Performance objectives. The objectives outlined on the TVA, Strategic Business Unit and Business Unit scorecards are the road map to TVA's success. Maintain a clear line of sight between your work and the Winning Performance Objectives.
- Maintain a constant focus on executing your plans and goals and delivering on your commitments to customers and business associates.
- Always exhibit Winning Behaviors.
- Spend TVA's money as if it were your own, and insist on the same quality from our vendors that our customers demand from us.
- Take care of TVA's property, including computers, office furniture and supplies, as well as intellectual property—the information and ideas that are the foundation of our business.
- Make informed, fact-based decisions.
- Be a good citizen of your community – practice excellence in public service.

What you see on TVA's Scorecards is an attempt to measure TVA's effectiveness as a business. All of the things you see in this document are measured on TVA's Scorecards.

5 Who else benefits from TVA?

- Residential users of TVA power.
- Valley communities.
- Valley businesses and industries.
- Tourists and other recreational users of the river system.
- Investors.
- Legislators.
- The nation.

These are some of our stakeholders.

4 Who are TVA's customers?

- 158 municipalities and co-ops that, in turn, provide electricity to 8.3 million people.
- 62 directly served industries and federal facilities.
- The 11 utilities surrounding TVA with which we have power exchange arrangements.

A full list of TVA's customers can be found on TVA's internal Web site under Customer Service & Marketing and Bulk Power Trading.

TVA's service area

TVA has a diverse generating mix and a reliable transmission system to meet the needs of a large service area.



Transmission facts

- 99.999-percent reliability.
- 17,000 miles of transmission line.
- 80,000-square-mile service area.
- 120,000 transmission-line structures.
- 240,000 right-of-way acres.
- Strategically located for power transfers.

Generation facts

- Nation's largest public power system.
- 31,517 megawatts of net winter dependable capacity; generated more than 150 billion kilowatt-hours of electricity in 2002.
- 11 fossil plants: generated 63-percent of TVA production.
- Three nuclear plants: have earned highest ratings for efficiency and low-cost production.
- 29 hydro plants: generate electricity and also provide for flood control, navigation, recreation.
- 72 combustion turbine units at six sites; start quickly and help meet peak demands for power.
- One pumped-storage plant; generating capacity of 1,530,000 kilowatts of electricity to help meet peak demands.
- Three wind turbines, 15 solar installations and one methane-gas site provide energy.



You can view this special insert on TVA's internal Web site.
For more about TVA operations and facilities, go to www.tva.com.